RECORD

APR 2 1 2000

TECH CENTER 1600/2900

RAW SEQUENCE LISTING

PATENT APPLICATION US/09/316,048

DATE: 04/19/2000

TIME: 10:13:02

Input Set: 1316048.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

ENTERED

```
<110> APPLICANT: MOULAND, Andrew J.
 1
 2
            COHEN, Eric A. .
            WICKHAM, Louise
 3
            LUO, Ming
 5
            DUCHAINE, Thomas
 6
     <120> TITLE OF INVENTION: MAMMALIAN STAUFEN AND USE THEREOF
     <130> FILE REFERENCE: 10875-77
 7
     <140> CURRENT APPLICATION NUMBER: US/09/316,048
     <141> CURRENT FILING DATE: 1999-05-21
 9
10
     <150> EARLIER APPLICATION NUMBER: CA 2,238,656
11
     <151> EARLIER FILING DATE: 1998-05-22
     <160> NUMBER OF SEQ ID NOS: 27
12
     <170> SOFTWARE: PatentIn Ver. 2.1
     <210> SEQ ID NO 1
14
15
     <211> LENGTH: 3142
     <212> TYPE: DNA
17
     <213> ORGANISM: Homo sapiens
18
     <220> FEATURE:
     <221> NAME/KEY: CDS
19
20
     <222> LOCATION: (3)..(1775)
21
     <400> SEQUENCE: 1
22
            ac ttc ctg ccg ggc tgc ggg cgc ctg agc gct ctt cag cgt ttg cgc
                                                                                        47
          Phe Leu

1

ggc ggc tgc gcc tct ctc tcs
Gly Gly Cys Al: Potential interference

ccc ccg gcc cc
Pro Pro Ala A: 09/286, 959

cct ccc ttc: although I made a

50

10216) W 1944 Pes Groseilers of
23
               Phe Leu Pro Gly Cys Gly Arg Leu Ser Ala Leu Gln Arg Leu Arg
24
25
            gge gge tge ger tet ete teg get eee get tee ttt gae ege ete eee
                                                                                        95
                                          - Ala Pro Ala Ser Phe Asp Arg Leu Pro
26
27
28
                                                                    e ege ete tte
                                                                                        143
29
                                                                     u Arg Leu Phe
30
                                                                        45
31
                                                                    bt too tto coo
                                                                                        191
32
                                                                    er Ser Phe Pro
33
                                                                   60
                                                                   acg agc tcg gag
34
                                                                                        239
                                                                   Thr Ser Ser Glu
35
36
37
                                                                   aat gca ctg tgc
            Gln Gln Pro Glu Ser Ile ....
38
                                                                  Asn Ala Leu Cys
39
             80
                                                                                  95
40
            atg aaa ctt gga aaa aaa cca atg tat aag cct gtt gac cct tac tct
                                                                                        335
            Met Lys Leu Gly Lys Lys Pro Met Tyr Lys Pro Val Asp Pro Tyr Ser
41
42
                              100
                                                     105
                                                                            110
43
            cgg atg cag tcc acc tat aac tac aac atg aga gga ggt gct tat ccc
44
            Arg Met Gln Ser Thr Tyr Asn Tyr Asn Met Arg Gly Gly Ala Tyr Pro
```

PAGE:

1



PAGE: 2 RAW SEQUENCE LISTING DATE: 04/19/2000 TEMCENTER 1600/2000 PATENT APPLICATION US/09/316,048 TIME: 10:13:02

Input Set: 1316048.RAW

45				115					120					125			
46	_								_		cct						431
47	Pro	Arg	_	Pne	тyr	Pro	Pne		vaı	Pro	Pro	Leu		Tyr	Gin	Val	
48			130					135					140				
49	_						_				ggc					_	479
50	Glu		Ser	Val	Gly	Gly		Gln	Phe	Asn	Gly	Lys	Gly	Lys	Thr	Arg	
51		145					150					155					
52	_	_					-				gcg				-	_	527
53		Ala	Ala	Lys	His	_	Ala	Ala	Ala	Lys	Ala	Leu	Arg	Ile	Leu		
54	160					165					170					175	
55											aat		_	_		-	575
56	Asn	Glu	Pro	Leu	Pro	Glu	Arg	Leu	Glu	Val	Asn	Gly	Arg	Glu		Glu	
57					180					185					190		
58								-		_	caa					_	623
59	Glu	Glu	Asn		Asn	Lys	Ser	Glu		Ser	Gln	Val	Phe		Ile	Ala	
60				195					200					205			
61											gtg						671
62	Leu	Lys	Arg	Asn	Leu	Pro	Val	Asn	Phe	Glu	Val	Ala	Arg	Glu	Ser	\mathtt{Gly}	
63			210					215					220				
64					_						gtt	_	-				719
65	Pro		His	Met	ràs	Asn		Val	Thr	Lys	Val	Ser	Val	Gly	Glu	Phe	
66		225					230					235					
67			_		-			_		-	att		_			_	767
68		Gly	Glu	Gly	Glu	_	Lys	Ser	Lys	Lys	Ile	Ser	Lys	Lys	Asn		
69	240					245					250					255	
70											tta						815
71	Ala	Ile	Ala	Val		Glu	Glu	Leu	Lys	-	Leu	Pro	Pro	Leu		Ala	
72					260					265					270		
73										_	aaa					-	863
74	Val	Glu	Arg		Lys	Pro	Arg	Ile	_	Lys	Lys	Thr	Lys		Ile	Val	
75				275					280					285			
76											aāa						911
77	Lys	Pro		Thr	Ser	Pro	Glu	_	Gly	Gln	Gly	Ile		Pro	Ile	Ser	
78			290					295					300				
79											gag						959
80	Arg		Ala	Gln	Ile	Gln		Ala	Lys	Lys	Glu	_	Glu	Pro	Glu	Tyr	
81		305					310					315					
82					_	_			-	_	cgc				-	-	1007
83		Leu	Leu	Thr	Glu	-	Gly	Leu	Pro	Arg	Arg	Arg	Glu	Phe	Val		
84	320					325					330					335	
85			_						-	_	gga	_				-	1055
86	Gin	Val	Lys	Val	_	Asn	His	Thr	Ala		Gly	Thr	Gly	Thr		rys	
87					340					345	_				350		
88	_		-	_	-		_	_			atg	_					1103
89	Lys	Val	Ala	_	Arg	Asn	Ala	Ala		Asn	Met	Leu	Glu		Leu	Gly	
90				355					360					365			
91			_	_			_				ccc	_		_			1151
92	Phe	Lys		Pro	Gin	Arg	Gin		Thr	Lys	Pro	Ala		ГЛЗ	Ser	Glu	
93			370					375		_			380				
94	gag	aag	aca	CCC	ata	aag	aaa	cca	ggg	gat	gga	aga	aaa	gta	acc	ttt	1199

PAGE: 3 RAW SEQUENCE LISTING DATE: 04/19/2000

PATENT APPLICATION US/09/316,048 TIME: 10:13:02

Input Set: 1316048.RAW

95		Glu	_	Thr	Pro	Ile	Lys	Lys	Pro	Gly	Asp	Gly	Arg	Lys	Val	Thr	Phe	
96	,		385					390					395					
97			_					_	-							gag	-	1247
98			Glu	Pro	Gly	Ser	-	Asp	Glu	Asn	Gly		Ser	Asn	rys	Glu	Asp	
99		400					405					410					415	
100					_				_		_	_	_		-	gga		1295
101		Glu	Phe	Arg	Met		Tyr	Leu	Ser	His		Gln	Leu	Pro	Ala	Gly	Ile	
102						420					425					430		
103				_				-	_	_	_	-		-	_	caa		1343
104		Leu	Pro	Met		Pro	Glu	Val	Ala		Ala	Val	Gly	Val		Gln	Gly	
105					435					440					445			
106						_				_					-	aag		1391
107		His	His		Lys	Asp	Phe	Thr	_	Ala	Ala	Pro	Asn		Ala	ГЛЗ	Ala	
108				450					455					460				
109		_	_		_	_		_	_		_	_				acc	-	1439
110		Thr		Thr	Ala	Met	Ile	Ala	Arg	Glu	Leu	Leu	Tyr	Gly	Gly	Thr	Ser	
111			465					470					475					
112				_					_							cac	-	1487
113			Thr	Ala	Glu	Thr		Leu	Lys	Asn	Asn		Ser	Ser	Gly	His		
114		480					485					490					495	
115							_	_			_					ctt		1535
116		Pro	His	Gly	Pro		Thr	Arg	Pro	Ser		Gln	Leu	Asp	Tyr	Leu	Ser	
117						500					505					510		
118		_	_	_			_	_	_			_				aac		1583
119		Arg	Val	Gln	_	Phe	Gln	Val	Glu	_	Lys	Asp	Phe		_	Asn	Asn	
120					515					520					525			
121		-		-		_					_			_		cct	-	1631
122		Lys	Asn		Phe	Val	Ser	Leu		Asn	Cys	Ser	Ser		Pro	Pro	Leu	
123				530					535					540				
124																atg		1679
125		IIe		His	GIA	IIe	GLY	_	Asp	vaı	GIU	ser	-	His	Asp	Met	ALA	
126			545					550					555					
127			_				_	_	_			_	-			agt		1727
128			ьeи	ASI	тте	ьeu	_	теп	Leu	ser	GIU		Asp	GIII	GIII	Ser		
129		560					565					570			~~~		575	1005
130			-		_						_			_		agg	_	1775
131		GIU	Mec	PIO	Arg		GIĀ	ASII	GIY	PIO		ser	Val	Cys	GTA	Arg	СУВ	
132		+				580					585		+ ~ + ~	. + +	- ~- ~ .	590	atass	1025
133																	actgaa	
134			-	-													ggtaa	
135					-	-		-				_		_			eggetg	
136		_				_	-				-		-				atagc	
137																	gcagat	
138					_												aacgg	
139																	gccatg	
140						_	-										gcttc	
141 142																	gtaccc htttc	
142					_	-						-		_			attttc	
144				_	_												ctagt	
7.4.4		Laad	acayo	ac a	ay c c l	-yyac	aa Cl	. cy c	Lyay	, act	-yaçı	LLA	cuac	··aal	(racus	gacaaa	4433

PAGE: 4 RAW SEQUENCE LISTING DATE: 04/19/2000 PATENT APPLICATION US/09/316,048 TIME: 10:13:02

Input Set: I316048.RAW

145		-					-										acagtt	
146		tcag	gtgat	tgc a	aaati	tgtgt	g c	cctc	tggti	t cag	gctga	aaac	agt	catg	gac	tttca	aaaac	2615
147		ctte	gaata	aag 1	tata	ccaca	ag ti	tgtai	taaa	t tg	gacaa	attt	agga	aatt	tta	aacti	tagat	2675
148		gato	catti	tgg 1	ttcca	attti	t at	tttc	attt	t tai	tttt	tgtt	aat	gcaa	aca	ggact	taaat	2735
149		gaactttgat ctctgtttta aagattatta aaaaacattg tgtatctata catatggct												tggctc	2795			
150		ttgaggactt agctttcact acactacagg atatgatctc catgtagtcc atataaacct													2855			
151		gcagagtgat tttccagagt gctcgatact gttaattaca tctccattag ggctgaaaag													2915			
152		aatg	gacct	tac q	gttt	etgta	at a	cagci	tgtg	t tg	ettti	tgat	gtt	gtgti	tac	tgtad	cacaga	2975
153		agt	gtgtg	gca (ctga	gcto	et go	cgtgi	tggt	c cgi	catg	gaaa	acc	tggta	agc	cctg	gagtt	3035
154		aagt	cact	gct 1	tccat	ttcat	tt gi	ttta	egat	g gaa	attti	ttct	ccc	catg	gaa	tgtaa	agtaaa	3095
155		actt	taagi	tgt 1	ttgt	catca	aa ta	aaat	ggta	a ta	ctaaa	aaaa	aaa	aaaa				3142
156	<210>	SEQ	ID I	NO 2														
157	<211>	LEN	GTH:	591														
158	<212>	TYPE	2: PI	RT														
159	<213>	ORGA	ANISI	M: Ho	omo	sapie	ens											
160	<400> SEQUENCE: 2 Phe Leu Pro Gly Cys Gly Arg Leu Ser Ala Leu Gln Arg Leu Arg Gly																	
161		Phe	Leu	Pro	Gly	Cys	Gly	Arg	Leu	Ser	Ala	Leu	Gln	Arg	Leu	Arg	Gly	
162		1			-	5	_	-			10					15		
163		Gly	Cys	Ala	Ser	Leu	Ser	Ala	Pro	Ala	Ser	Phe	Asp	Arg	Leu	Pro	Pro	
164		_	-		20					25					30			
165		Pro	Ala	Arg	Arg	Arg	Pro	Pro	Pro	Pro	Arg	Pro	Leu	Arg	Leu	Phe	Pro	
166				35	_	_			40		-			45				
167		Pro	Phe	Val	Pro	Ser	Ser	Ser	Pro	Phe	Phe	Pro	Ser	Ser	Phe	Pro	ser	
168			50					55					60					
169		Ser	Pro	Pro	Pro	Pro	Arg	Thr	Ala	Gly	Arg	Gly	Thr	ser	Ser	Glu	Gln	
170		65					70					75					80	
171		Gln	Pro	Glu	Ser	Ile	Thr	Pro	Thr	Val	Glu	Leu	Asn	Ala	Leu	Cys	Met	
172						85					90					95		
173		Lys	Leu	Gly	Lys	Lys	Pro	Met	Tyr	Lys	Pro	Val	Asp	Pro	Tyr	Ser	Arg	
174		_		_	100					105					110			
175		Met	Gln	Ser	Thr	Tyr	Asn	Tyr	Asn	Met	Arg	Gly	Gly	Ala	Tyr	Pro	Pro	
176				115		_		_	120				_	125				
177		Arg	Tyr	Phe	Tyr	Pro	Phe	Pro	Val	Pro	Pro	Leu	Leu	Tyr	Gln	Val	Glu	
178			130					135					140					
179		Leu	Ser	Val	Gly	Gly	Gln	Gln	Phe	Asn	Gly	Lys	Gly	Lys	Thr	Arg	Gln	
180		145			_	_	150					155					160	
181		Ala	Ala	Lys	His	Asp	Ala	Ala	Ala	Lys	Ala	Leu	Arg	Ile	Leu	Gln	Asn	
182						165					170					175		
183		Glu	Pro	Leu	Pro	Glu	Arg	Leu	Glu	Val	Asn	Gly	Arg	Glu	Ser	Glu	Glu	
184					180					185					190			
185		Glu	Asn	Leu	Asn	Lys	Ser	Glu	Ile	Ser	Gln	Val	Phe	Glu	Ile	Ala	Leu	
186				195					200					205				
187		Lys	Arg	Asn	Leu	Pro	Val	Asn	Phe	Glu	Val	Ala	Arg	Glu	Ser	Gly	Pro	
188			210					215					220					
189		Pro	His	Met	Lys	Asn	Phe	Val	Thr	Lys	Val	Ser	Val	Gly	Glu	Phe	Val	
190		225					230					235					240	
191			Glu	Gly	Glu	Gly	Lys	Ser	Lys	Lys	Ile	Ser	Lys	Lys	Asn	Ala	Ala	
192		_		_		245					250					255		
193		Ile	Ala	Val	Leu	Glu	Glu	Leu	Lys	Lys	Leu	Pro	Pro	Leu	Pro	Ala	Val	
194					260					265					270			

PAGE: 5 RAW SEQUENCE LISTING DATE: 04/19/2000 PATENT APPLICATION US/09/316,048 TIME: 10:13:02

Input Set: I316048.RAW

														•			•
195	Gl	u Ar	g Val	Lys	Pro	Arg	Ile	Lys	Lys	Lys	Thr	Lys	Pro	Ile	Val	Lys	
196			275	-		·		280	-	•		_	285			_	
. 197	Pr	o Gl	n Thr		Pro	Glu	Tyr	Gly	Gln	Gly	Ile	Asn	Pro	Ile	Ser	Arg	
198		29					295	_		. •		300				_	
199	L∈		a Gln	Ile	Gln	Gln		Lys	Lys	Glu	Lys	Glu	Pro	Glu	Tyr	Thr	
200	30					310		-	•		315				-	320	
201			u Thr	Glu	Arg		Leu	Pro	Arq	Arq	Arq	Glu	Phe	Val	Met	Gln	
202					325	2				330					335		
203	Va	1 Lv	s Val	Glv		His	Thr	Ala	Glu		Thr	Glv	Thr	Asn		Lvs	
204	• •	1		340					345	4		2		350	*	•	
205	Va	ו ב	a Lys		Asn	Ala	Ala	Glu		Met	Leu	Glu	Ile		Glv	Phe	
206	• •		355	_				360					365		2		
207	TiV	s Va	l Pro		Ara	Gln	Pro		Lvs	Pro	Ala	Leu	Lvs	Ser	Glu	Glu	
208	-,	37			5		375					380					
209	Lv		r Pro	Ile	Lvs	Lvs		Glv	Asp	Gly	Arq	Lys	Val	Thr	Phe	Phe	
210	38				2	390				•	395	•				400	
211			o Gly	Ser	Glv		Glu	Asn	Gly	Thr	Ser	Asn	Lys	Glu	Asp		
212					405				•	410			•		415		
213	Ph	e Ar	g Met	Pro		Leu	Ser	His	Gln	Gln	Leu	Pro	Ala	Gly	Ile	Leu	
214			,	420					425					430			
215	Pr	o Me	t Val	Pro	Glu	Val	Ala	Gln	Ala	Val	Gly	Val	Ser	Gln	Gly	His	
216			435					440			•		445		-		
217	ні	s Th	r Lys	Asp	Phe	Thr	Arq		Ala	Pro	Asn	Pro	Ala	Lys	Ala	Thr	
218	-	45	_	_			455					460		_			
219	Va		r Ala	Met	Ile	Ala	Arg	Glu	Leu	Leu	Tyr	Gly	Gly	Thr	Ser	Pro	
220	46	5				470					475					480	
221	Th	r Al	a Glu	Thr	Ile	Leu	Lys	Asn	Asn	Ile	Ser	Ser	Gly	His	Val	Pro	
222					485					490					495		
223	ні	s Gl	y Pro	Leu	Thr	Arg	Pro	Ser	Glu	Gln	Leu	Asp	Tyr	Leu	Ser	Arg	
224				500					505					510			
225	Va	1 G1	n Gly	Phe	Gln	Val	Glu	Tyr	Lys	Asp	Phe	Pro	Lys	Asn	Asn	Lys	
226			515					520					525				
227	As	n Gl	u Phe	Val	Ser	Leu	Ile	Asn	Cys	Ser	Ser	Gln	Pro	Pro	Leu	Ile	
228		53					535					540					
229	Se	r Hi	s Gly	Ile	Gly	Lys	Asp	Val	Glu	Ser	Cys	His	Asp	Met	Ala	Ala	
230	54					550					555					560	
231	Le	u As	n Ile	Leu	Lys	Leu	Leu	Ser	Glu	Leu	Asp	Gln	Gln	Ser	Thr	Glu	
232					565					570					575		
233	Me	t Pr	o Arg	Thr	Gly	Asn	Gly	Pro	Met	Ser	Val	Cys	Gly	Arg	Cys		
234				580					585					590			
235	<210> SE	Q ID	NO 3														
236	<211> LE	NGTH	: 321	7													
237	<212> TY	PE:	DNA														
238	<213> OR			omo .	sapi	ens											
239	<220> FE																
240	<221> NA																
241	<222> LC				(1	850)											
242	<400> SE																
243																gegegt	
244	ct	ctct	cggc	tccc	gctt	cc ti	ttga	ccgc	c tc	cccc	cccc	ggc	ccgg	egg (cgcc	cgcctc	120

PAGE: 6

. . . .

VERIFICATION SUMMARY PATENT APPLICATION US/09/316,048

DATE: 04/19/2000 TIME: 10:13:02

Input Set: I316048.RAW

Line ? Error/Warning Original Text

344 W Invalid/Missing Amino Acid Numbering

986 W Invalid/Missing Amino Acid Numbering